David Hungerford Ashton, OAM

6 July 1927 – 22 November 2005

Dr David Ashton, was the authority on Australia's majestic Mountain Ash, aptly named by Mueller, *Eucalyptus regnans*, and devoted his professional life to the elucidation of ecological details of plant communities. An artist, poet, pianist and composer, as well as ecologist, David Ashton valued the beauty as well as the science of the living landscape.

David's school and university studies shaped his decision to become a botanist. Having studied agricultural botany and geology at Melbourne High School, he began an agricultural science course at the University of Melbourne in 1946. During our conversations not long before he died, he still remembered his first-year botany excursions to Frankston heath and forests in the Dandenong Ranges and his pleasure at being in the group led by the ecologically-enthusiastic professor of botany, John Turner. David was so impressed that plants had names and ecological reasons for growing where they did, that he switched to science and majored in botany and geology. He also remembered his introduction to more distant forests during his third-year ecology excursion to east Gippsland in 1948.

The following year, Professor Turner handed David Ashton, newly BSc, an ecological puzzle for his postgraduate research project, thereby seeding, and perhaps sealing, his fate as an ecologist. Mosaics of fire-generated, even-aged stands of Mountain Ash did not seem to fit the model of forest regeneration, which originated in the northern hemisphere where uneven-aged forests were perpetuated by continuous regeneration in forest gaps. It was well-known that Mountain Ash regenerated vigorously after fire; but could it regenerate in forest gaps? Or was the dramatic episodic disturber, fire, essential for its regeneration?

Venerable stands of *E. regnans* (over two centuries old) in Melbourne's water catchment on the Great Dividing Range north of the thirsty city had escaped the ferocious 1939 fires. In 1949 David began the difficult and arduous task of mapping the vegetation and soils of the Big Ash forest in the Wallaby Creek catchment and initiated a study of regeneration in these long-unburnt stands – a tall order indeed. Little did young David realise that this was the beginning of his fifty-year solo investigation of *E. regnans* and its forests. In the 1950s, despite weather-, wombat- and leech-induced tribulations, and the lack of an ecologist-supervisor, David managed to reveal many details of the Mountain Ash's life-story, including its apparent ability to regenerate in a forest gap. In 1957 he was awarded a PhD for his thesis, 'Studies on the autecology of *Eucalyptus regnans* F.v.M.'.

Meanwhile, David thrice joined Professor Turner's summer team to assess the vegetation in plots which Maisie Fawcett (later Mrs Carr) had established in grazed (unfenced) and un-grazed (fenced) areas on the Bogong High Plains in the mid-1940s.

Dr Ashton interested generations of Melbourne University students in ecological processes in Victorian plant communities. From 1960 he taught ecology to science and forestry undergraduates, introducing them to various plant communities during excursions. An annual week-long excursion to such distant destinations as Wilson's Promontory, Lake Mountain, a patch of warm temperate rainforest near Marlo in east Gippsland, the Snowy River valley near Suggan Buggan, the Bennison High Plains, Mt Eccles and Mt Cobbler, allowed final-year undergraduates to undertake a detailed ecological study.

From the early 1960s David Ashton also supervised postgraduate research projects on a wide range of plant communities, including messmate forests near Wallaby Creek and on Wilson's Promontory, Lilly Pilly *Acmena smithii* on Wilson's Promontory, Myrtle Beech *Nothofagus cunninghamii*, on Mt Donna Buang, the intriguing outlier of Bull Mallee *Eucalyptus behriana* near Melton, Brisbane Ranges plant communities,

Westernport Bay mangroves *Avicennia marina*, Cypress Pine *Callitris glaucophylla*, in the Snowy Valley, Kanooka *Tristaniopsis laurina* in east Gippsland warm temperate rainforests, Lake Mountain Snow Gum *Eucalyptus pauciflora*, and Bogong High Plains grasslands.

He helped with the tabulation of plant community information for Victoria's first conservation survey, which was undertaken by his postgraduate student, Judy Frankenberg, after submitting her MSc thesis on Wilson's Promontory Lilly Pilly in 1965. Frankenberg's *Nature Conservation in Victoria* (VNPA, 1971) reveals the sometimes urgent need for the conservation of many of the plant communities which Ashton had the ecological foresight to have his postgraduate students investigate.

David Ashton joined the FNCV in October 1965 – two months after his first paper appeared in *The Victorian Naturalist*. It presents the results of his final-year ecology students' investigation of seed germination in the soils of nine Victorian plant communities in 1964. He continued to use *The Victorian Naturalist* to report work undertaken by his ecology class. The November 1967 issue carries the report of another soil seed study – of germinable seed in soils from long-unburnt and 1939-regenerated snow gum woodland at Lake Mountain. Subsequent issues of *The Victorian Naturalist* carry reports of students' investigations during the annual week-long ecology excursion in the late 1960s – 'Ecological Studies of Tunnel Cave, Mt. Eccles' in volume 85 in 1968, and 'Ecological Studies on the Bennison High Plains' in volume 90 in 1973. Other papers discuss epiphytes on Myrtle Beech trees at Mt Donna Buang, gum-topped stringybarks in the Trentham district, a possible tri-hybrid eucalypt and root fusion between *E. regnans* and *E obliqua* in the Cathedral Range area, and artificial hybrids of *E regnans*. Dr Ashton also contributed a paper on the history of the McCoy Society to a special McCoy issue of *The Victorian Naturalist* in 2001.

Ashton's Wallaby Creek and High Plains investigations reveal the crucial importance of long-term studies, with decades, not years, being required for the elucidation of adequate ecological explanations. Had he transferred his ecological attention away from the Big Ash forest in the 1950s, he would not have noticed the subsequent demise of the few saplings that had managed to grow from seedlings in a forest gap, and would not have been provoked to examine in more detail the biology and ecology of *E. regnans* in order to explain properly the intimate intricacies of its life. In the 1990s he prepared three substantial papers on his half-century's scientific scrutiny of *E. regnans*, which were published in 1999 and 2000.

In the 1980s, after several re-surveys of Maisie Carr's plots, Dr Ashton supervised Dick (RJ) Williams' doctoral investigation of vegetation dynamics on the Bogong High Plains. Over four decades after their 1939 (post-fire) regeneration, shrubs were senescing above carpets of grass rather than shrub-seedlings, allowing Dick Williams to confirm the cattlemen-confronting irony Maisie Carr had earlier reported – that heathland shrubs are eventually replaced by grasses.

Awards and honours followed University retirement, beginning with the prestigious Medal of the Ecological Society of Australia in 1990. Dr Ashton became a Foundation Fellow of the Royal Society of Victoria in 1995. In 1999 he was doubly honoured. Victoria's Department of Natural Resources and Environment established the 'David Ashton Biodiversity Award' for departmental staff for scientific achievements which enhance the understanding, conservation or management of Victoria's biodiversity. Rangers at the Kinglake National Park, which then included the Big Ash forest, organised a celebration for his research jubilee, and a beautiful bronze commemorative plaque was unveiled at Wallaby Creek. Since this is still part of Melbourne's water catchment and therefore inaccessible to the public, the plaque was erected near the Toorourrong Reservoir carpark, in sight of the tall forests David Ashton knew so well. In 2000 he received a Parks Victoria Kookaburra Award for his contributions to Victoria's parks, in 2001 a medal of the Order of Australia for services to plant science, and in 2002 a University of Melbourne DSc degree for his published work.

Thanks largely to the establishment of national parks, Dr David Ashton is outlived by plant communities which he and his students investigated. He is also survived by his published papers, which provide foundations for wise conservation and management decisions; by the ideas and practices of his postgraduate students in CSIRO, national parks and forestry, universities and schools; and by the 'David Ashton Biodiversity Award' to encourage the conservation of Victoria's biodiversity.

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The Victorian Twitchathon: racing for ornithological conservation

On a warm weekend in November 2005 the Seven Year Twitchers raced and won Birds Australia's Victorian Twitchathon. The following article is a diary of this remarkable two-day event.

So what is the Twitchathon? The Twitchathon is a 24-hour race that involves dozens of birdwatchers madly rushing around the Australian bush attempting to see or hear (read twitch) as many bird species as possible. The aim of the Twitchathon is to raise money, through team sponsorship, for ornithological research and conservation.

The name of the race is based on the term 'twitcher', hard-core birdwatchers who chase rare birds. The rules state that each team must have at least two participants, with four being the norm. Our team had four members: Tim Dolby, Greg Oakley, John Harris and Fiona Parkin.

An important aspect of winning the Twitchathon is that teams must cover enormous distances in a 24-hour period. If you include the pre-race reconnaissance, by the end of the race we had travelled well over 1400 kilometres. The main reason for this is that in order to see a wide variety of bird species you must also cover as many different habitat types as possible. During the race we visited Mallee, Box-Ironbark, grassy woodlands, wet and dry sclerophyll forests, freshwater wetland, coastal heath, saltmarsh, mudflat and the open ocean. The diversity of birds we saw reflected these diverse habitats.

Day One

Over the years the Seven Year Twitchers have used a number of different routes around Victoria. This year we chose to start our race at Goschen Bushland Reserve, a small isolated mallee reserve west of Lake Boga in northern Victoria. Goschen usually contains spring-flowering Long-leaf Emu-bush *Eremophila longifolia*, a small rough-barked tree that acts as a vital food source for some of our rare and nomadic honeyeaters. One bird in particular, the elusive, almost mythical, Black Honeyeater loves the stuff. A member of

Spotted Pardalote *Pardalotus punctatus*.
Photograph by Jonathon Thornton